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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/768,444

02/02/2004

Yoshiki Murakami

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7590

03/13/2008

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.  
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EXAMINER

VEZERIS, JAMES A

ART UNIT

PAPER NUMBER

3693

NOTIFICATION DATE

DELIVERY MODE

03/13/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/768,444	<b>Applicant(s)</b> MURAKAMI ET AL.	
	<b>Examiner</b> JAMES A. VEZERIS	<b>Art Unit</b> 3693	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-13 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/30/04, 6/30/04, 3/25/2004, 2/02/2004</u> .                  | 6) <input type="checkbox"/> Other: _____                          |



## **Detailed Action**

### **Specification Objection**

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### **Claim Rejections- 35 U.S.C 102(e)**

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 4-7, 9, 10, 12, 13 rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,671,585 to Lof et al. (Hereinafter "Lof").

### **Regarding Claim 1.**

Lof teaches a power trading risk management system, comprising:

an electricity procurement planning unit for producing an electricity procurement plan by combining electricity to be generated by one or plural owned power generators and electricity to be procured from a market; (See Column 12-13 Lines 20-4)

a generation-procurement curve producing unit for producing a generation-procurement curve based on the electricity procurement plan; (See Column 12 Lines 31-35)

a portfolio producing unit for producing a portfolio of electricity to be generated by owned power plants and electricity to be procured from a power trading market that is matching to the generation-procurement curve ; (See Column 14 Lines 37-53; Column 25-26 Lines 57-13)

a risk evaluation unit for evaluating a risk of the portfolio; (See Column 38-39 Lines 43-9)

a profit estimating unit for estimating a profit of electricity sale according to the portfolio; (Column 25-26 Lines 57-13)

a portfolio reorganizing unit for reorganizing the portfolio; (See Col 25-26 Lines 57-13) Examiner notes that the reorganization is constantly ongoing.

a best portfolio proposing unit for judging a best portfolio which can maximize the profit while maintaining the risk in the profit of electricity sale in a certain period within a tolerance among the reorganized portfolios. (See Col 39 Lines 3-29)

## **Regarding Claim 2.**

Lof further teaches:

means for deciding a combination of power generators to be operated to maximize a profit accrued from power generation. (See Column 12-13 Lines 20-4)

**Regarding Claim 4.**

Lof further teaches:

an estimation of future electricity demand unit for estimating fluctuations of future electricity demand according to past electricity demand fluctuations; (See Col 18 Lines 15-47)

the system wherein the portfolio producing unit includes a financial product related to a weather in a corresponding region in the portfolio; (See Col 7 Lines 1-13)

the best portfolio proposing unit judges the best portfolio which can maximize the profit while maintaining the risk in the profit of electricity sale in a certain period within the tolerance among the reorganized portfolios which are including the financial product related to the weather. (See Column 13 Lines 41-48)

**Regarding Claim 5.**

Lof further teaches:

the risk evaluating unit manages a position and calculates a risk index for the electricity portfolio by use of the relationship between demand and price which varies depending on a country, a region, and time wherein the system is operated. (See col 39 lines 1-9)

**Regarding Claim 6.**

Lof further teaches:

the risk evaluating unit uses at least any of volatility, risk sensitivity, skewness of

a rate of return distribution, kurtosis of the rate of return distribution, a percent point of the rate of return distribution, a percent point of a price distribution, a value at risk and an earning at risk for managing the position and calculating the risk index for the electricity portfolio. (See Col 42-43 Lines 63-7) Examiner notes the use of volatility.

**Regarding Claim 7.**

Lof further teaches:

the risk evaluating unit uses a probability distribution different from a normal distribution as a distribution of the rate of return attributable to a power trading upon risk evaluation of the portfolio. (See Col 42-43 Lines 63-7)

**Regarding Claim 9.**

Lof further teaches:

a power generation risk parameter evaluating unit for simulating a fluctuation of a profit of each power plant and evaluating a risk parameter of power generation by use of a fluctuation of a fuel price; (See Column 12-13 Lines 20-4) Examiner notes that the fuel is wind.

an electricity procurement risk parameter evaluating unit for evaluating a risk parameter of electricity to be procured from a power trading market; (See Column 38-39 Lines 43-9)

an electricity demand risk parameter evaluating unit for evaluating a risk parameter of an electricity contract with each customer; (See Column 38-39 Lines 43-9)

a portfolio producing unit for producing a portfolio according to a proportion of electricity to be generated by owned power plants and electricity to be procured from a

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power trading market, the risk parameter of power generation, the risk parameter of electricity procurement and the risk parameter of electricity contract; (See Column 12-13 Lines 20-4)

a risk value evaluating unit for evaluating a risk of the portfolio; (See Column 38-39 Lines 43-9)

a portfolio reorganizing unit for reorganizing the portfolio by adjusting the proportion of the electricity to be generated by owned power plants and electricity to be procured from the market to maximize a profit while maintaining the risk amount within a tolerance; (See Col 25-26 Lines 57-13) Examiner notes that the reorganization is constantly ongoing.

an outputting means for deciding the proportion of the electricity to be procured from the market which can maximize the profit while maintaining the risk amount within the tolerance as an optimum combination and outputting the optimum combination as a power generation plan. (See Column 13 Lines 41-48)

**Regarding Claim 10.**

Lof further teaches:

means for deciding a combination of power generators to be operated to maximize a profit accrued from power generation. (See Column 12-13 Lines 20-4)

**Regarding Claim 12.**

Lof further teaches:

producing an electricity procurement plan by combining electricity to be generated by one or plural owned power generators and electricity to be procured from



a market; (See Column 12-13 Lines 20-4)

producing a generation-procurement curve based on the electricity procurement plan; (See Column 12 Lines 31-35)

producing a portfolio of electricity to be generated by owned power plants and electricity to be procured from a power trading market that is matching to the generation-procurement curve; (See Column 14 Lines 37-53; Column 25-26 Lines 57-13)

evaluating a risk of the portfolio; (See Column 38-39 Lines 43-9)

estimating a profit of electricity sale according to the portfolio; (See fig 32)

reorganizing the portfolio; (See Col 25-26 Lines 57-13)

judging a best portfolio which can maximize the profit while maintaining the risk in the profit of electricity sale in a certain period within a tolerance among the reorganized portfolios. (See Col 39 Lines 3-29)

### **Regarding Claim 13.**

Lof further teaches:

simulating a fluctuation of a profit of each power plant; (See col 39 lines 1-9)

evaluating a risk parameter of power generation by use of a fluctuation of a fuel price; (See Column 38-39 Lines 43-9)

evaluating a risk parameter of electricity to be procured from a power trading market; (See Column 38-39 Lines 43-9)

evaluating a risk parameter of an electricity contract with each customer; (See Column 38-39 Lines 43-9)

producing a portfolio according to a proportion of electricity to be generated by owned power plants and electricity to be procured from a power trading market, the risk parameter of power generation, the risk parameter of electricity procurement and the risk parameter of electricity contract; (See Column 12-13 Lines 20-4)

evaluating a risk of the portfolio; (See Column 38-39 Lines 43-9)

reorganizing the portfolio by adjusting the proportion of the electricity to be generated by owned power plants and electricity to be procured from the market to maximize a profit while maintaining the risk amount within a tolerance; (See Col 25-26 Lines 57-13)

deciding the proportion of the electricity to be procured from the market which can maximize the profit while maintaining the risk amount within the tolerance as an optimum combination; (See Column 12-13 Lines 20-4)

outputting the optimum combination as a power generation plan. (See Col 39 Lines 3-29)

### **Claim Rejections- 35 U.S.C. 103(a)**

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lof in view of IEEE publication S. R. Huang (Hereinafter "Emissions")

<http://ieeexplore.ieee.org/iel5/6841/18391/00850002.pdf>.

**Regarding Claim 3.**

Lof further teaches:

an estimation of future electricity demand unit for estimating fluctuations of future electricity demand according to past electricity demand fluctuations; and

an estimation of electricity price fluctuation unit for estimating future electricity price fluctuations according to the past electricity demands, past price fluctuations and a relationship between electricity demand and price in a predetermined period as well as the estimated fluctuations of future electricity demand; and

Lof fails to further teach the system wherein:

the portfolio producing unit includes a price of an emission right for carbon dioxide in the portfolio; (See Emissions introduction second paragraph)

the best portfolio proposing unit judges the best portfolio which can maximize the profit while maintaining the risk in the profit of electricity sale in a certain period within the tolerance among the reorganized portfolios which are including the price of the emission right of carbon dioxide. (See Lof Col 39 Lines 3-29; Emissions introduction second paragraph)

However, Emissions teaches including emissions rights and tolerance factors into an electricity procurement plan.

Since emissions rights are required by law in most countries, it would be obvious to one in the skill to modify Lof to include the emissions right features of Emissions. There is motivation to combine Emissions and Lof because it keeps the system of Lof in compliance with all regulations, while allowing for the portfolio producing unit to create an accurate prediction.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lof in view of Official Notice.

**Regarding Claim 11.**

Lof fails to further teach:

the risk value evaluating unit uses an asset and liability management method of any of maturity ladder analysis, term gap analysis, and duration gap analysis for management of the portfolio.

However, Official Notice is taken that these methods are old and well known in the art. It is obvious to one skilled in the art to modify Lof to perform gap analysis, maturity ladder analysis, and duration gap analysis for management of the portfolio.

There is motivation to use these methods because they allow for operating a business as close to its performance potential as possible.

**Claim Objections**

Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES A. VEZERIS whose telephone number is (571)270-1580. The examiner can normally be reached on Monday-alt. Fridays 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Kramer can be reached on 571-272-6803. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James A. Kramer/  
Supervisory Patent Examiner, Art Unit 3693

/JAMES A VEZERIS/  
Examiner, Art Unit 3693

March 3, 2008